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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,113

06/08/2005

Zhun Zhong

US020553

8864

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7590

08/18/2009

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

TRAN, PABLO N

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

08/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/538,113	Applicant(s) ZHONG, ZHUN	
	Examiner Pablo N. Tran	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 and 23-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andrus et al. (hereinafter "Andrus", US Pat No 6,993,334) and in view of Korpela et al. (hereinafter "Korpela", US Pat No 6,510,146).

As per claims 1 and 18, Andrus disclosed a method for minimizing a communication service disruption period during a handoff of a mobile station in a wireless local area network (WLAN), wherein providing a plurality of APs in the network with an assigned channel of operation and a pre-configured nearest-neighbor table comprised of records transmitting the pre-configured nearest-neighbor table from the plurality of APs to associated STAs (fig. 3, fig. 4, col. 9/ln. 3-col. 11/ln. 25).

Andrus disclosed such handoff method by determining the quality of neighbor's channels but not explicitly in a prioritize manner. However, Korpela disclosed such discriminate search method of neighbor's channels (fig. 4a, fig. 4b, and col. 8/ln. 37-col. 9/ln. 15). Therefore, it would have been obvious to one of ordinary skill in the art at the

time of invention for Andrus to utilize such teaching of Korpela to reduce handoff's period.

The modified communication system of Andrus and Korpela do not specifically suggest that each record of the neighbor AP's list be partitioned into fields, wherein at least a first field identifying a nearest neighbor AP and a second field identifying the nearest neighbor AP's channel of operation. However, such is notoriously well known in the art that the examiner takes Official Notice of such. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate such signaling method, well known, in order to easily recognize operational channels of nearest Access points to save time and avoid impair channels during handoff.

As per claim 2, the modified communication system of Andrus and Korpela further disclosed such sequentially searching those remaining channels of operation in the network not included in the table in the case where there is at least one candidate AP (see Korpela, col. 8/ln. 60-col. 9/ln. 15).

As per claims 3 and 19, the modified communication system of Andrus and Korpela further disclose transmitting the table via a modified probe response frame (see Andrus, col. 9/ln. 8-22, see Korpela, col. 4/ln. 50-col. 7/ln. 65, wherein it is clear that message includes a list of the access points current dedicated/operating channels).

As per claim 4, the modified communication system of Andrus and Korpela further disclose the STA requesting the list (see Korpela, col. 9/ln. 16-46).

3. Claims 5-8 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified system of Andrus et al. (6,993,334) and Korpela et al. (6,510,146) and further in view of the Applicant Admitted Prior Art (hereinafter "AAPA").

As per claims 5-6 and 20-21, the modified communication system of Andrus and Korpela teaches such message transmission a list of the access points current dedicate/operating channels but not explicitly that message is transmitted by a beacon frame or a dedicated AP channel announcement management frame. However, the AAPA taught such claimed signaling method. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention at the time of invention for Andrus and Korpela to incorporate such signaling method, as taught by AAPA, in order to convey AP's channels of operation in an organized manner to save time during handoff.

As per claim 7, the modified communication system of Andrus, Korpela, and AAPA further disclose the signaling method of broadcasting to a BSS or unicast to a particular STA in the BSS (see AAPA, 0044).

As per claim 8, the modified communication system of Andrus, Korpela, and AAPA further disclose the dedicated AP channel announcement management frame is representing as bitmap (see AAPA, 0045).

4. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified system of Andrus et al. (6,993,334) and Korpela et al. (6,510,146) and

further in view of Lappetelainen et al. (hereinafter "Lappetelainen", US Pat No 6,671,495).

As per claims 9 and 22, the modified communication system of Andrus and Korpela disclose such method of continuously broadcasting of the list of the neighbor access points current dedicate/operating/assign channels in accordance to the 3GPP2 Upper layer standard but not specifically teaches such that the access point has means to change the assign channels. However, Lappetelainen taught that the access point perform such channel changed (col. 4/ln. 38-col. 5/ln. 36). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention at the time of invention for the modified communication system of Andrus and Korpela to utilize such means to reduce interference.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for Published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2618

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-directauspto.gov>. Should

You have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

August 12, 2009

/Pablo N Tran/

Primary Examiner, Art Unit 2618